Flanagan foodservice

FleetSmart PROFILES

FLANAGAN FOODSERVICE

Using Computers to Improve Delivery Operations and Fuel Efficiency

Flanagan Foodservice is taking advantage of computer technology to enhance route planning and monitor driver performance. Computers have radically changed the company's operations, reducing the total number of kilometres driven and contributing to a 15 per cent improvement in fuel consumption rates.

About the company

Flanagan Foodservice sells and distributes fresh and frozen food products, dry groceries and restaurant supplies to customers throughout Ontario and along the Montréal-Hull corridor in Quebec. Headquartered in Kitchener, the company also has distribution centres in Owen Sound and Sudbury. The three locations employ approximately 200 people, including 42 drivers. Flanagan's fleet consists of 29 trucks, comprising 6 single-axles, 14 tandems and 9 tractors. These vehicles are driven a combined total of more than two million kilometres per year.

Route planning software introduced in 1987

As business expanded in the 1980s, Flanagan's traffic managers found that the traditional manual method of route selection was no longer practical. In 1987, a decision was made to purchase route planning software and accompanying computer hardware,

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at a total cost of $30,000. The software stores geographically coded customer locations in a database and uses this information to provide drivers with the most efficient sequence for completing a given set of deliveries. The goods to be delivered are then loaded on the truck in reverse order, so that the first order on is the last off.

Rick Flanagan, Executive Vice-President of the company, recalls that "it was difficult to actually justify the expenditure" at the time the route optimization program was implemented. However, after achieving up to a 15 per cent reduction in kilometres per stop across the fleet, Mr. Flanagan acknowledges that "it would be inconceivable that we could operate without it now."

On-board computers introduced

In 1995, in an effort to further improve customer service, fleet fuel efficiency and productivity, Flanagan Foodservice undertook another computerization initiative by installing on-board devices to monitor driver performance in terms of vehicle speed, braking patterns and idling. At the same time, the company's drivers were trained in progressive shifting techniques.

Drivers' concerns about having their performance monitored by computers were quickly laid to rest by a number of factors, including the timely announcement of a profit-sharing program for all employees. More important, however, was the fact that the on-board monitoring system was capable of automatically completing driver logbooks. The on-board module records trip information on a card, which is read by an office-based computer at the end of the workday.

Unexpected benefits

In addition to fuel-efficiency gains, the monitoring system has resulted in a number of unexpected benefits to Flanagan Foodservice.

For example, the system has helped the company identify equipment problems that were wasting fuel. In one instance, the system revealed that a particular driver who was driving two similar vehicles was achieving markedly different rates of fuel consumption. An investigation disclosed that the fuel pump on one of the vehicles was delivering too much fuel to the engine. Another unanticipated benefit has been the system's ability to provide information on what occurred in a vehicle immediately before an accident. For example, the on-board computer can provide information that shows whether there was

The data from the card is stored in the company's management information system, eliminating the need for manual completion of logbooks, a task that most drivers considered time-consuming and bothersome. Acceptance of the monitoring system was also facilitated by the fact that one of the company's drivers was involved in the system selection process.

Almost immediately, the minor concerns about monitoring gave way to drivers "wanting to see how well they could do," reports Murray MacKinnon, Traffic Manager at the Kitchener warehouse. Drivers were able to review their own performance in terms of keeping to the speed limit and minimizing over-revving, hard braking and idling time. This led to friendly competition, first between individual drivers and then between the company's three distribution centres. Now, when Flanagan has to rent trucks (typically two or three times a week), the on-board monitoring capability is missed by drivers and management alike.

A 15 per cent reduction in fuel consumption

Prior to the installation of the on-board monitoring devices, fuel consumption across the Flanagan fleet averaged 43.5 litres per 100 kilometres. This has been reduced to an average of 36.9 litres per 100 kilometres – a 15 per cent improvement. The company has estimated an 18-month payback of the $60,000 investment in the system (which includes hardware, software and training).

a missed shift by the driver or whether the accident was preceded by hard braking.

Perhaps the most significant of the unforeseen benefits has been an 80 per cent reduction in accident and insurance claims in the first year of on-board monitoring. While weather conditions and other factors played a role in this decline, the company attributes at least half of the reduction to improved driving practices that have resulted from the monitoring program. In 1995, 32 of 39 eligible drivers received the company's driver safety award.

Next steps

Flanagan Foodservice is now planning the next steps of its fleet management program. In particular, the company is working toward a better understanding of what is involved in making different types of deliveries.

"It's very different making a delivery at Christmas to a customer located in a mall than it is making a delivery to a hospital," notes Mr. Flanagan.

The company is now using the on-board computers to measure service times on a customer-by-customer basis and is attempting to feed this information automatically to the route planning program. By establishing an interface between the two systems, Flanagan hopes to achieve even further improvements in customer service, fuel economy and productivity.

For more information on fleet energy-saving opportunities, please write to

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